

Appl. No.: 09/975,492
Attorney Docket No.: 10906-007
Reply to Office Action of October 4, 2003

III. Remarks

Reconsideration and re-examination of this application in view of the above amendments and the following remarks is herein respectfully requested.

Claims 1, 16, 39, and 42 are being amended, accordingly, after entering this amendment, claims 1, 16, 17, 39, and 42-44 remain pending in this application.

Claim Rejections – 35 U.S.C. § 112

Claims 16 and 42 have been rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The Applicants have amended claims 16 and 42 to independent form to remove the § 112 problems cited by the Examiner. Accordingly, the Applicants respectfully request that the Examiner reconsider and withdraw these rejections under 35 U.S.C. § 112.

Claim Rejections - 35 U.S.C. § 103(a) – Part One

Claims 1 and 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over United States Patent No. 3,948,371 to Lonne (Lonne) in view of United States Patent No. 4,483,569 to Smith (Smith).

The Applicants assert that Lonne in view of Smith does not teach each and every element of the claimed invention. Specifically, Lonne in view of Smith does not teach an "aligning ring having a convex spherical face" and a "rotatable race having a concave spherical face". Claims 1, 16, 39, and 42 have been amended to specifically claim an

Appl. No.: 09/975,492
Attorney Docket No.: 10906-007
Reply to Office Action of October 4, 2003

aligning ring having a convex spherical face and a rotatable race having a concave spherical face as shown in Figures 16 and 17. The Applicants assert that although Lonne does show an aligning ring and rotatable race having spherical faces, as shown in Figure 2 of Lonne, that Lonne does not disclose an aligning ring having a convex spherical face and a rotatable race having a concave spherical face, as claimed in the present application. The present invention provides the benefit of providing an aligning ring and a rotatable race that will stay engaged because the forces acting on the aligning ring and the rotatable race act to push the rotatable ring into the concave spherical surface of the rotatable race. This feature eliminates the need for a support spring 15, as shown in Figure 2 of Lonne, to keep the aligning ring in position.

Further, the Applicants respectfully assert that there is no basis in the art for combining Lonne and Smith. The present invention is directed to a clutch bearing that allows misalignment. Lonne is directed to the same type of device, however, Smith is not. Smith is directed to a sealed ball and socket joint. The Applicants assert that there is no teaching, suggestion, or incentive within the cited art that supports the combination of Lonne and Smith, and that it would not be inherent to those skilled in the art to look to combine the features of a sealed ball and socket joint with a clutch release bearing. Nowhere in the art is the desirability of the combination suggested.

Additionally, the Applicants assert that Smith is nonanalogous art with regard to Lonne and the present invention. The Applicants assert that the Smith reference for a sealed ball joint is not within the field of the inventor's endeavor with respect to clutch release bearings, and further, that the Smith reference is not reasonably pertinent to the

Appl. No.: 09/975,492
Attorney Docket No.: 10906-007
Reply to Office Action of October 4, 2003

particular problem with which the present invention addresses. The present invention allows a clutch plate to be engaged or disengaged while allowing slight angular and radial mis-alignment between the clutch plate and the bearing. Smith is directed to a sealed ball a socket joint which supports a ball bearing within a socket. It is the Applicant's belief that a person of ordinary skill in the art would not have been apprised of the Smith reference during development of the present invention.

The Applicants assert that in view of the arguments made above, that the present invention, as claimed in Claims 1 and 17 are patentable over Lonne in view of Smith. Accordingly, the Applicants respectfully request that the Examiner reconsider and withdraw these rejections under 35 U.S.C. § 103(a).

Claim Rejections - 35 U.S.C. §103(a) – Part Two

Claims 16 and 42 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lonne in view of United States Patent No. 4,130,324 to Becker (Becker).

The Applicants assert that Lonne in view of Becker does not teach each and every element of the claimed invention. Specifically, Lonne in view of Becker does not teach an "aligning ring having a convex spherical face" and a "rotatable race having a concave spherical face". Claims 1, 16, 39, and 42 have been amended to specifically claim an aligning ring having a convex spherical face and a rotatable race having a concave spherical face as shown in Figures 16 and 17. The Applicants assert that although Lonne does show an aligning ring and rotatable race having spherical faces, as shown in Figure 2 of Lonne, that Lonne does not disclose an aligning ring having a

Appl. No.: 09/975,492
Attorney Docket No.: 10906-007
Reply to Office Action of October 4, 2003

convex spherical face and a rotatable race having a concave spherical face, as claimed in the present application. The present invention provides the benefit of providing an aligning ring and a rotatable race that will stay engaged because the forces acting on the aligning ring and the rotatable race act to push the rotatable ring into the concave spherical surface of the rotatable race. This feature eliminates the need for a support spring 15, as shown in Figure 2 of Lonne, to keep the aligning ring in position.

Further, the Applicants respectfully assert that there is no basis in the art for combining Lonne and Becker. The present invention is directed to a clutch bearing that allows misalignment. Lonne is directed to the same type of device, however, Becker is not. Becker is directed to a seal for a self aligning bearing. The Applicants assert that there is no teaching, suggestion, or incentive within the cited art that supports the combination of Lonne and Becker, and that it would not be inherent to those skilled in the art to look to combine the features of a sealed self aligning bearing with a clutch release bearing. Nowhere in the art is the desirability of the combination suggested.

The Applicants assert that in view of the arguments made above, that the present invention, as claimed in Claims 16 and 42 is patentable over Lonne in view of Becker. Accordingly, the Applicants respectfully request that the Examiner reconsider and withdraw these rejections under 35 U.S.C. § 103(a).

Appl. No.: 09/975,492
Attorney Docket No.: 10906-007
Reply to Office Action of October 4, 2003

Claim Rejections - 35 U.S.C. §103(a) – Part Three

Claim 39 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Lonne in view of Smith and further in view of United States Patent No. 3,985,215 to Ernst (Ernst).

The Applicants assert that in view of the arguments made in Part One above, that Lonne in view of Smith and further in view of Ernst does not teach each and every element of the claimed invention. Specifically, Lonne in view of Smith and further in view Ernst does not teach an "aligning ring having a convex spherical face" and a "rotatable race having a concave spherical face".

Additionally, the Applicants assert that the combination of Smith with Lonne and Ernst is an improper combination. The Applicants assert that there is no teaching, suggestion, or incentive within the cited art that supports the combination of Lonne, Ernst, and Smith, and that it would not be inherent to those skilled in the art to look to combine the features of a sealed ball and socket joint (Smith) with a clutch release bearing (Lonne and Ernst). Nowhere in the art is the desirability of the combination suggested.

Further, the Applicants assert that Smith is nonanalogous art with regard to Lonne, Ernst, and the present invention. The Applicants assert that the Smith reference for a sealed ball joint is not within the field of the inventor's endeavor with respect to clutch release bearings, and further, that the Smith reference is not reasonably pertinent to the particular problem with which the present invention addresses. It is the

Appl. No.: 09/975,492
Attorney Docket No.: 10906-007
Reply to Office Action of October 4, 2003

Applicant's belief that a person of ordinary skill in the art would not have been apprised of the Smith reference during development of the present invention.

The Applicants assert that in view of the arguments made above, that the present invention, as claimed in Claim 39 is patentable over Lonne in view of Smith and further in view of Ernst. Accordingly, the Applicants respectfully request that the Examiner reconsider and withdraw this rejection under 35 U.S.C. § 103(a).

Claim Rejections - 35 U.S.C. §103(a) – Part Four

Claims 43 and 44 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lonne in view of Smith in view of Ernst, and further in view of United States Patent No. 4,629,049 to Lassiaz (Lassiaz).

The Applicants assert that claim 39 is allowable in view of the arguments above in Part Three, and therefore, assert that claims 43 and 44 are allowable as depending, either directly or indirectly, from allowable independent claim 39. Accordingly, the Applicants respectfully request that the Examiner reconsider and withdraw these rejections under 35 U.S.C. § 103(a).

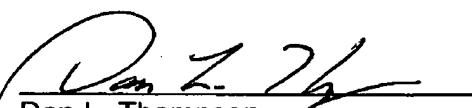
Appl. No.: 09/975,492
Attorney Docket No.: 10906-007
Reply to Office Action of October 4, 2003

Conclusion

In view of the above amendments and remarks, it is respectfully submitted that the claims as presently amended are patentably distinguishable over the art of record and that this application is now in condition for allowance. Such action is respectfully requested.

Respectfully submitted by,

Dated: 1-5-2004



Dan L. Thompson
Reg. No.: 54,490
Attorney for Applicant

BRINKS HOFER GILSON & LIONE
P.O. Box 10395
Chicago, IL 60610
(734) 302-6000